

# **United States Air Force**

# Air Force Materiel Command



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**FACT SHEET** 

# **Aquatic Preserves**

#### Introduction

Eglin Air Force Base is the largest air force base in the free world, including 724 square miles of land area and about 130,000 square miles of controlled airspace overlying land and water. In this setting, Eglin conducts its primary mission of full-service air armament development through weapons system research, development, testing and evaluation; training; space operations; and base and range support. While fulfilling its mission, Eglin also manages its natural resources, acting as a steward to protect plants and animals for future generations.

Eglin Air Force Base borders Rocky Bayou, one of Florida's 42 aquatic preserves. It also contains portions of a second aquatic preserve, the Yellow River Marsh

An aquatic preserve is an area with submerged lands restricted from human development.

Aquatic Preserve.

These lands are chosen because of their outstanding beauty, importance to local ecology and their value to scientific research.

The Yellow River Marsh and Rocky Bayou were both named "Outstanding Florida Water" by Florida's legislature in 1979 and have been recognized by scientists as exceptional water resources. The Yellow River Marsh is fed by the fresh water of the Yellow River, the swiftest flowing river in Florida. This marsh encompasses about 16,435 acres, including about 2,500 acres of the western portion of Eglin. The Rocky Bayou Aquatic Preserve is much smaller, only about 480 acres. It receives its fresh water from two creeks and from several smaller "steephead" streams, areas where groundwater seeps up through sand to form a stream.

Steephead streams are found nowhere else in the world but this region. They support unique wildlife, including the dusky salamander, the Florida bog frog and the endangered Okaloosa darter.

Aquatic
Preserves
are complex
communities
made up of
forested
wetlands,
freshwater and

brackish marshes and sandy grassbeds. The blending of freshwater and

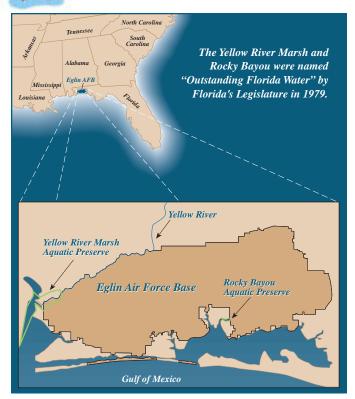
saltwater in these estuarine and marsh communities creates a habitat that supports many plants, fish, reptiles, amphibians, birds and mammals.

#### **Forested Wetlands**

A forested wetland community supports trees that flourish



Aquatic Preserves Eglin Air Force Base



in poorly drained soils. The forests have an evergreen appearance and include laurel, live and water oaks, cypress, bay trees and pines. Luxurious vegetation shelters and feeds such animals as deer, otter, beaver, alligator, water snake, raccoon and bear. At the Rocky Bayou Aquatic Preserve, state recreation area rangers have observed nesting osprey, listed in Florida as a species of special concern. They have also observed the nest of a bald eagle, a species listed by the federal government as threatened.

#### **Marshes**

Marshes receive floodwater after heavy rains and undergo daily tidal water level changes. Many plants thrive in these marshes, including several types that grow under water. Pollutants, excess nutrients, and sediments are naturally filtered by floodwaters which wash through these marshes, thereby protecting area drinking water. Marshes also provide safe, sheltered habitats for marine and estuarine organisms to reproduce and develop. The wildlife of a marsh ranges from plankton, shrimp, crabs, and snails to

fish, rodents and birds. Larger mammals include the raccoon, opossum and marsh rabbits. Wading birds, such as herons and egrets, feed primarily in the marsh edges and nest in forested wetlands.

# **Submerged Aquatic Vegetation**

The wildlife in open water and seagrass bed habitats includes abundant fish and crustacean species. Some of these species require a saltwater/freshwater interface during their life cycles.

Submerged aquatic vegetation — underwater grassbeds — of the aquatic preserves appear to be at risk. Longtime residents and commercial fishermen have observed a significant reduction in the grassbeds, which are home to oysters, shrimp and fish. Scientists trace the problem to fungal parasites, poor water quality, heavy rainfall and dredging activities.

# **Impacts to Aquatic Preserves**

Aquatic preserves' natural systems and the life they harbor are impacted by changes to the land that surrounds them. These changes include increased residential and commercial development which can deteriorate water quality. Additionally, the construction of roads and bridges creates more storm-water runoff.

### **Aquatic Preserves Uses**

The Yellow River Marsh and Rocky Bayou Aquatic Preserves are enjoyed today as sites for recreational fishing, boating and swimming. Commercial fishing and navigation and limited adjacent land commerce (docks, bait shops, etc.) also impact these lands and waterways. The main objective of the resource management programs for the Yellow River Marsh and Rocky Bayou Aquatic Preserves is to protect the natural resources for the benefit of present day and future generations. Eglin joins the Aquatic Preserve management in efforts to protect these unique habitats.